

**DRAFT PROJECT AGREEMENT  
(Task Directive)**

**GOING-TO-THE-SUN ROAD REHABILITATION  
GLACIER NATIONAL PARK**

**GLAC 203S**

**February 23, 2000  
Revised May 17, 2000  
Revised June 16, 2000**

This project agreement describes the specific project requirements to be fulfilled, and duties to be performed by the principal partners in order to produce the agreed to services and products. The agreement will be revised and signed after public scoping.

**AGREED TO:**

\_\_\_\_\_  
PROJECT MANAGER, GLACIER NATIONAL PARK

\_\_\_\_\_  
DATE

\_\_\_\_\_  
DESIGN OPERATIONS ENGINEER, FEDERAL HIGHWAY ADMIN.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SUPERINTENDENT, GLACIER NATIONAL PARK

\_\_\_\_\_  
DATE

\_\_\_\_\_  
REGIONAL DIRECTOR, INTERMOUNTAIN REGION

\_\_\_\_\_  
DATE

Prepared by Frederick Babb, Project Manager, Glacier National Park (406) 888-7976

## **I. BACKGROUND**

The approved Glacier National Park General Management Plan divides the park into six geographic areas. The Going-to-the-Sun Road (GTSR) is located within the Going-to-the-Sun area.

The area's philosophy is to provide all visitors with an opportunity to experience the scenic majesty and historic character of the park through a wide range of visitor activities. The cultural significance and traditional use of the Going-to-the-Sun Road will be emphasized. The Road, Lake McDonald Lodge, and Sperry and Granite Chalets will be managed as historic resources in keeping with their National Historic Landmark status.

The road was opened in 1932. In 1983 it was placed on the National Register of Historic Places. In 1985 it was declared a National Historic Civil Engineering Landmark and in 1997 it was designated as a National Historic Landmark. Its character including width, scenic vistas, and classic stone masonry walls all contribute to that designation and will be preserved.

The Going-to-the-Sun Road is the only route through the park that directly links the east and west sides, and its scenic value and diverse visitor experiences are unparalleled. Each year approximately 2 million visitors are drawn to the area and drive this scenic route. Local and regional economies have become dependent upon the visitors drawn to Glacier National Park.

Because the road is the park's primary automotive route, it defines the circulation pattern. The road accesses principal points of interest and offers many stunning views. Use has increased from fewer than 40,000 cars in 1933 to approximately 475,000 cars annually. At peak times during July and August, increased traffic volume causes crowding at pullouts and parking areas along the road. Visitors who are frustrated by the lack of parking and who want to stop to experience the park, pull off and park in undesignated areas, causing resource damage, congestion, and safety problems.

Public transportation has been available in the park on the Going-to-the-Sun Road since the road was built. Glacier was one of the many western parks that used fleets of touring cars. This culminated in the historic red bus fleet in the 1930's. There are national parks in the west that still have a token historic bus in use or on display, but Glacier is the only park where a fleet was in use until the summer of 1999. Although the red busses were taken off line in 1999 for safety reasons, it is the intent of the NPS and Glacier Park, Inc. to have similar vehicles in operation during 2001.

Public transportation provides a service to visitors who arrive without vehicles, have over-length vehicles, or who simply do not want to drive. In 1992, a shuttle service was initiated to meet the needs of hikers, but the demand was low. Some people believe that the shuttle system has not been effective because of high cost to users, limited capacity, and a limited schedule. Others think that the shuttle system works well, but they would like it expanded to increase its usefulness. The current transportation system is not subsidized by the government.

The challenge is to continue private vehicle use, as desired by the public, while ensuring an effective transportation system. Increasing numbers of bicycles and automobiles have also presented a safety concern. All these visitor uses must be managed while maintaining both the traditional driving experience and the historic character of the road.

Previous economic reports indicate that Glacier National Park generates approximately \$145 million and 2,100 jobs annually in Montana. Much of this economic activity takes place during the 4-5 month period that the alpine and sub-alpine section's of the Going-to-the-Sun Road are accessible. Plowing the road and finally opening it each spring is a major feat; plowing begins in April and is usually completed in June. Since the road was opened in 1932, the upper reaches have not been substantially repaired or rehabilitated. Today, that section of the road is in need of major repair work.

Before 1982, funding for road repairs was minimal and came entirely from the park's annual operating budget. In 1982, Congress passed the Surface Transportation Assistance Act, which included funding for federal road reconstruction/rehabilitation projects. In partnership with the Federal Highway Administration (FHWA), the National Park Service (NPS) established a road improvement program. Since then, approximately \$18 million has been spent to rehabilitate 20 miles of the road. The 20 miles have been mostly at lower sections; less than 1 mile of the high-mountain section has been rehabilitated (Logan Pass-Oberlin Bend 1995-1997).

## **ISSUE**

At the heart of the issue is the fact that the majority of the road construction can only be done in the summer and fall, which is also the time that most visitors experience the Going-to-the-Sun Road.

After the Logan Pass-Oberlin Bend project (1995-1997), the FHWA and the NPS determined that the current annual funding levels were inadequate to ensure long-term use of the Going-to-the-Sun Road. During 1995-1996, visitors experienced long and frustrating delays, and contractors had difficulty repairing the road and maintaining traffic flow. The experience at Logan Pass led engineers, landscape architects, and planners to conclude that approximately 50 years would be required to finish rehabilitating the road using the current approach and level of funding. It is likely that some segments of the road would fail during that time, closing the road and necessitating unplanned emergency repairs.

The NPS and the FHWA have jointly developed alternatives for road rehabilitation based on the following criteria. The criteria will continue to guide future construction scenarios for the Going-to-the-Sun Road.

- Cost-effectively restore the Going-to-the-Sun Road while preserving the historic character, fabric, width, and significance.
- Restore the Going-to-the-Sun Road to a quality condition.
- Minimize effects on natural, cultural, and scenic resources.
- Provide a world-class visitor experience.

- Collaborate with others in exploring options that stimulate local and regional economic growth.

An 11-mile critical section between the West Side Tunnel and the East Side's Siyeh Bend is the controlling element in any long-range program to repair the road. This alpine section is the most spectacular part of the road. The rehabilitation of this section has the greatest potential to impact both visitors and the local economy. In some places seemingly carved out of the side of the mountain it is the most difficult portion of the road to rehabilitate because of the very narrow width and the limited area available for staging construction and performing repairs. There are many historically significant stone masonry features, including historic stone retaining walls and stone masonry guard walls. The narrow road corridor, the short construction season, and extreme and unpredictable weather conditions affect both the integrity of the road and the reconstruction effort. Avalanches, rock falls, and repeated freezing and thawing continually deteriorate the road, and jeopardize both the public and construction workers safety.

One of the major work elements is the repairing of the historically significant stone retaining walls along the Going-to-the-Sun Road. The 1994 FHWA Retaining Wall Inventory and 1997 Update are the sources for the condition of these walls. Although the current information is accurate, the FHWA continues to update it as ongoing annual inspections are performed under what is termed the Glacier Wall Management Program. This program was started recognizing that the walls continue to deteriorate with time and additional repair needs must be continually identified and required.

The 1997 Retaining Wall Inventory Update (FHWA 1998) listed serious structural problems for at least 76 of the walls examined on the Going-to-the-Sun Road. Some of these walls exceed 30 feet in height. Repair needs were identified and listed by priorities 1, 2, and 3. The recommended repairs on priorities 1 and 2 need to be completed as soon as possible, including some that require major structural work. If they are not repaired within this time frame, the risks for catastrophic failure increase substantially. The remaining walls are rated priority 3, but will probably become priority 1 or 2 if the work is not done within 3-8 years.

Engineering studies have defined seven major work elements as needing to be performed to rehabilitate the Going-to-the-Sun Road. Only one of these work elements is the repair of the historic stone retaining walls. Other major work elements are the repair of stone masonry guard walls, removable guard walls in avalanche areas, outside lane deficiencies (slumping), drainage improvements, upgrading of turnouts & parking, and providing a new pavement structure.

Funding (approximately 5.1 million dollars) was programmed for emergency repairs during Fiscal Years 1999 and 2000. However, the funding does not cover the total wall repair currently estimated at 9.7 million dollars. Initially the preferred alternative for the rehabilitation of the Going-to-the-Sun Road was to undertake a fast-track construction effort. In that scenario, engineering analysis projected that four to six years would be needed for completion. The estimated cost would range between 70 and 80 million dollars based on 1999 dollars.

In the Final Environmental Impact Statement (FEIS), the preferred alternative is to rehabilitate the Going-to-the-Sun Road, preserve its historic character and significance, complete the needed repairs before the road could fail, minimize impacts on natural resources, visitors, and local economy, and minimize the rehabilitation costs.

The 1999 Department of Transportation Appropriations Act, redirected one million dollars of existing NPS funds for additional independent engineering and economic studies and the formulation of an advisory committee. The act states the Engineering Study would assess the best available technology to reduce costs and mitigate impacts. The Economic Analysis would take into account the economic impact of the road on the park and the surrounding communities. The citizen advisory committee has been formed with which the NPS will consult in making decisions regarding the rehabilitation of the Going-to-the-Sun Road. MK Centennial, a world class Architectural and Engineering firm, has been hired to assist the Advisory Committee and the NPS in working on the Going-to-the Sun Road.

In order to make a sound decision, the NPS will prepare an EIS based on the alternatives and analyzed in the Engineering Study. Until additional studies can be completed, the NPS will continue its current program to perform critical road repairs as necessary and within available funding to preserve the road and address safety concerns.

## **II. SCOPE**

The Going-to-the-Sun Road, like others in the NPS system, has been maintained by the agency, as well as possible given the level of available funding. These efforts, although successful in keeping the Road usable for park visitors, falls short of the desired goal: a long-term fix that returns the Road to a safe pleasurable driving experience that enhances visitor enjoyment of Glacier National Park, while maintaining the Road's historical features, and preserving park resources.

The decision making process for this project will be carried out in an open, well understood process, thoroughly explaining all decisions made by the NPS. To achieve the objective a public participation process will be developed that gives interested individuals, groups, and agencies opportunities to provide information and recommendations.

### **A. Study Assumption/Parameters**

1. The goal is to reconstruct, rehabilitate, and enhance the entire Going-to-the-Sun Road to a quality maintainable condition and provide a high quality visitor experience while minimizing visitor impacts.
2. The Environmental Impact Statement (EIS) will be based on the feasible alternatives developed in the Engineering, Cultural Landscape, and Transportation/Visitor Use studies and analyzed in the Socio-Economic Study.

3. The Advisory Committee will terminate once the NPS has made a final decision, or when funding is no longer available, whichever comes first. All appointments will terminate with the Committee.
4. The NPS, FHWA, and the Advisory Committee will define the project parameters and the desired results. MK Centennial will provide alternatives to achieve the desired outcome.
5. The NPS has decision authority for this project.
6. The project will provide the following deliverables:
  - a) Project Agreement.
  - b) An evaluation of 1998 Road Inventory and other studies relating to the Going-to-the-Sun Road.
  - c) Engineering Study.
  - d) Socio-economic study.
  - e) Transportation/Visitor Use Plan.
  - f) Historic Roads Inventory/Cultural Landscape Report.
  - g) The site specific data information (i.e. topo, soils, wildlife, threatened & endangered species, vegetation) and analysis will occur during the EIS process based on the sites and alternatives recommended in the EIS. (Additional funding required).
  - h) EIS (draft and final) and Record of Decision (ROD).
  - i) Public participation program including web site.
  - j) Other products that may be identified by Advisory Committee.

## **B. Engineering Study Scope**

1. Independently verify the condition of the Going-to-the-Sun Road. Additional studies and or sites may be required to supplement existing data and support the condition assessment. An inventory and analysis of selected existing information will be the first priority followed by cost estimates for any additional information.
2. Develop feasible alternatives with costs and schedules for the rehabilitation of the Going-to-the-Sun Road, including construction and traffic management, visitor use, and impacts. The alternatives assess the best available technology to reduce costs and mitigate impacts. Identify and discuss the critical elements necessary to accomplish the rehabilitation such as visitor use and construction staging areas (description, size, and location). Analyze areas inside and outside the park based on available data.

In both the Engineering and Transportation studies the following critical elements need to be addressed; parking, trails, comfort stations, signing, interpretation and orientation information, public transportation, visitor capacity, and circulation (vehicle and pedestrian).

3. The Engineering Study will provide recommendations for operation and maintenance to protect the capital investment made on the Going-to-the-Sun Road. This would include the feasibility of an endowment for long term road maintenance.

The Engineering Study will be completed by June 1, 2001.

### **C. Socio-Economic Scope**

Develop a mitigation strategy for potential socio-economic effects. Prepare a Socio-economic analysis that will contribute to a better comparison of the alternative. The analysis will rely in part upon the following information:

1. Baseline economic information about businesses in the Glacier Park area so that rehabilitation/mitigation can be estimated. Detailed economic analysis of areas near Glacier in the United States and Canada. Determine how individual businesses and/or type of businesses in corridors near-by towns are going to be affected. Identify impacts within increasing distances (banding) from the park.
2. Econometric forecast of park visitation that would occur without the projects so that impacts of various alternatives might be estimated.
3. Models will be developed that directly link park visitation patterns with local business activity so that impacts of rehabilitation may be estimated.
4. Analysis will be conducted on the relationships between rehabilitation of the Going-to-the-Sun Road and the regional and national economy.
5. A plan identifying innovative marketing strategies will be developed.
6. The implications of public relations, advertising, and advance information during construction will be analyzed.
7. The goal is 95% accuracy based on current and forecasted visitation (i.e. origination, patters, and length of stay).

The socio-economic study will be completed by June 1, 2001.

### **D. Advisory Committee and Public Participation Program**

1. A charter has been developed and 17 members have been selected for the Advisory Committee.
2. A public involvement plan will be prepared and refined following public scoping. As part of this program, a public web site connected with Glacier National Park will be established.

3. An electronic bulletin board will be established for the Advisory Committee and the feasibility of a news clipping service for the committee, core planning and design team will be explored by the NPS.
4. The National Park Service will coordinate marketing and public information task with other organizations.

## **E. Transportation/Visitor Plan**

A Transportation/Visitor Plan will be developed for the Going-to-the-Sun Road and the surrounding region. This will be used to help develop and analyze options for rehabilitation of the Road during construction (short-term) and after construction (long-term). The Plan will be completed by June 1, 2001 and include the following elements:

1. Analyze existing data and determine if there are additional needs.
2. Determine primary visitor experience that all visitors should have the opportunity to visit (i.e. areas, facilities, and programs to include the red buses).
3. Determine visitor use thresholds before the desired visitor experience is compromised (include capacities).
4. The study will address options for short-term (during construction) and long-term (after construction). The alternatives will address phasing construction.
5. Alternatives considered in this study must include the following included in the General Management Plan:
  - ◆ building pullouts to replace those that have been removed with new ones in more appropriate locations;
  - ◆ providing additional interpretive and recreational opportunities along the road;
  - ◆ expanded transportation system and/or placing limits on the number of visitors allowed on the road at any one time.
6. Identify opportunities for enhancement of Glacier National Park's interpretive programs.
7. Analyze ways to maintain and increase current levels of visitation during construction.

## **F. Cultural Resource Report**



To support the project a Cultural Landscape Report will be prepared. This includes the historical roadway as well as other cultural features along the Going-to-the-Sun Road. The Lake McDonald and Rising Sun areas will also be included as part of this report. This study will be completed in two phases; a Cultural Landscape Inventory (CLI) that identifies and locates all relevant features along the roadway and a Cultural Landscape Report (CLR) which evaluates the resources and identifies management measures to protect them. The CLI would be completed in approximately 8 months. The CLR would be completed by June 1, 2001.

### **G. Environmental Impact Statement and Record of Decision**

This document is required to implement improvements on the Going-to-the-Sun Road project but was not legislatively requested and is not currently funded. The NPS and FHWA are pursuing various funding sources for this document and the necessary additional resource information. Products would be a Notice of Intent (NOI), Draft EIS, Final EIS, and Record of Decision (ROD). The EIS would be based on the alternatives developed in the Engineering Study, Transportation/Visitor Use Study, and the Cultural Landscape Report with input from the Advisory Committee. It is estimated that the EIS process would take between 18 and 20 months from the date funding is received. If funding is not provided, the technical documents will be completed by June 1, 2001 and the remaining work (EIS and additional data requirements) put on hold until funding is received.

## **III. PROJECT SCHEDULE, ROLES, AND RESPONSIBILITIES**

Glacier National Park is responsible for the overall direction of the project. MK Centennial will prepare the Engineering Study, Socio-Economic Study, and an Environmental Impact Statement. The park staff with FHWA assistance will collect all the necessary resource data that is currently available. The Advisory Committee will provide input throughout the process. The team will also coordinate with other Federal, State, Provincial, and local agencies to schedule road improvements in an optional manner.

The attached schedule outlines key products and a general schedule. The lead office for all tasks is Project Management, Glacier National Park. Failure to complete any of these tasks on schedule or within budget may result in delays or failure to complete the project on schedule.

## **IV. FUNDING**

Budgets were prepared for each of the products and/or services list in the project scope. These budgets listed on the following table provides an estimate of how the dollars will be divided among the various products and services in this Project Agreement. As the project moves forward the goal is to stay within the listed budget. However, if the cost estimates of a product or service exceed the available budget, the scope will be reduced, the various project budgets will be modified, alternative strategies to accomplish the service will be analyzed, and/or additional funds solicited. At this time

we estimate there are sufficient funds to accomplish all the projects and services except for the anticipated new resource data and the Environmental Impact Statement process (DEIS, FIES, and ROD). The current estimate for this work is \$1,100,000. Without this additional funding and the completion of the decision process the rehabilitation of the Going-to-the-Sun Road cannot occur.

<b>PRODUCT/SERVICE</b>	<b>CURRENT BUDGET</b>	<b>ADDITIONAL FUNDING REQUIREMENTS</b>	<b>TOTAL PRODUCT/SERVICE COSTS</b>
Engineering Study	435,000	-	435,000
Socio-Economic Study	300,000	-	300,000
Public & Park Staff Participation	50,000	-	50,000
Advisory Committee & Staff Support	215,000	-	215,000
Transportation/Visitor Use Study	225,000	-	225,000
Cultural Landscape Report	105,000	-	105,000
Environmental Impact Statement/Resource Data Requirements, Continuation of Project (Advisory Committee, Park Staff, and Public Participation)	-	1,100,000	1,100,000
<b>TOTALS</b>	<b>\$1,330,000</b>	<b>\$1,100,000</b>	<b>\$2,430,000</b>

## **V. PROJECT COMMITMENT / WARRANTY**

All principal parties involved are committed to providing quality services and products within budget and in a timely manner. We are dedicated to working in partnership as a means of focusing diverse ideas into an achievable product.

Any amendment to this Project Agreement that will affect the costs, scope, schedule, or successful completion of this project will be revised by the Core Team and Advisory Committee and then approved by the Superintendent, Glacier National Park. The party desiring the amendment shall propose the change in writing to the Project Manager. The subsequent discussion and decision shall be documented in a Project Agreement Amendment prepared by the Project Manager. All proposed amendments shall be decided within 15 working days from the receipt of the written proposal.

## **VI. PROJECT PARTICIPANTS**

### **DECISION TEAM**

Karen Wade, Regional Director, Intermountain Region, NPS  
Suzanne Lewis, Superintendent, Glacier National Park

**CORE PLANNING AND DESIGN TEAM** (Individuals with lead responsibility are underlined)

**NATIONAL PARK SERVICE**

Fred Babb, Project Manager/Contracting Officer Representative  
John Kilpatrick, Facility Manager  
Mary Riddle, Asst. Chief of Interpretation/GLAC Compliance Coordinator  
Jack Potter, Asst. Chief of Resource Management  
Ed Tafoya, Contracting Officer  
Dayna Hudson, Project Management Assistant

**FEDERAL HIGHWAYS ADMINISTRATION**

Dick Gatten, Design Operations Engineer

**MK CENTENNIAL**

Dick Bauman, Principle-in-Charge  
Craig Gaskill, Project Manager (Transportation Planning, Environmental Economics, Public Involvement)  
Jay Brasher, Project Manager (Engineering, Construction Management, Historic)

**ADVISORY COMMITTEE**

Randall Ogle – Advisory Committee Chairman  
Anna Marie Moe  
Barbara Pahl  
Brian Baker  
Byron O'Quinn  
David Jackson  
Don White  
Jayne Kremenik  
Linda Anderson  
Lowell Meznarich  
Mary Sexton  
Paul Sliter  
Susie Burch  
Tom McDonald  
Tony Jewett  
William Brooke  
William Dakin

**OTHER PARTICIPANTS / CONSULTANTS**

Jack Gordon, Park Landscape Architect, Glacier National Park  
Jan Knox, Concessions Manager, Glacier National Park  
Bob Boyack, Engineering and Equipment Supervisor, Glacier National Park  
Bruce Fladmark, Cultural Resource Management Specialist, Glacier National Park  
Larry Frederick, Chief of Interpretation, Glacier National Park  
Jerry Burgess, Park Engineer, Glacier National Park  
Jerry Nelson, Fee Program/Visitor Statistics, Glacier National Park  
Others to be determined and listed later